

WHAT IS CLAIMED IS:

1. A thermal conductivity detector, comprising:

a channel wall forming a channel;

two electrically conductive carriers traversing the channel; and

an electrically heatable heating filament, which is mounted in a central region of the channel so a fluid in the channel flows around the filament, and is held at ends of the filament on the two electrically conductive carriers,

wherein at least one of the two carriers is configured such that a minimum distance to the other carrier is larger in the central region of the channel than in a region nearer to the channel wall.
2. The thermal conductivity detector as claimed in Claim 1, wherein the at least one carrier has an at least approximately V-shaped section within the channel.
3. The thermal conductivity detector as claimed in Claim 1, wherein the at least one carrier consists essentially of metal.
4. The thermal conductivity detector as claimed in Claim 1, wherein the unheated heating filament is held under tension between the two carriers, and remains under tension at an operating temperature of the detector.
5. The thermal conductivity detector as claimed in Claim 1, further comprising:

a carrier plate supporting the carriers that hold the heating filament, and

a cover plate placed on the carrier plate,

wherein the channel is formed by a groove in the carrier plate and an additional groove in the cover plate.

6. The thermal conductivity detector as claimed in Claim 1, wherein each of the two carriers is configured such that a minimum distance to the other carrier is larger in the central region of the channel than in a region nearer to the channel wall.

7. A thermal conductivity detector, comprising:

a channel wall forming a channel;

two electrically conductive carriers traversing the channel; and

an electrically heatable heating filament suspended between central regions of the conductive carriers,

wherein at least one of the conductive carriers has a concavity in at least the central region of the at least one conductive carrier.

8. The thermal conductivity detector as claimed in Claim 7, wherein each of the conductive carriers has a concavity in at least the central region of the at least one conductive carrier.

9. A thermal conductivity detector, comprising:

two electrically conductive carriers mounted in a channel; and

an electrically heatable heating filament suspended in an area extending between central regions of the conductive carriers,

wherein at least one of the conductive carriers is mounted to distend away from the area when the detector temperature rises to an operating temperature.